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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/822,299

04/08/2004

L. Robert Deardurff

18282 USA

2079

21127

7590

07/13/2007

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EXAMINER

NGUYEN, THUKHANH T

ART UNIT

PAPER NUMBER

1722

MAIL DATE

DELIVERY MODE

07/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/822,299

Applicant(s)

DEARDURFF ET AL.

Examiner

Thu Khanh T. Nguyen

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-93 is/are pending in the application.
- 4a) Of the above claim(s) 32-47 and 69-89 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31, 48-68 and 90-93 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/14/05 & 4/8/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

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DETAILED ACTION

1. Applicant's election without traverse of claims 1-31, 48-68 and 90-93 in the reply filed on 05/04/07 is acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-27 and 90-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ingram (5,866,177) in view of Uchiyama (5,950,531).

Ingram discloses an apparatus for compression molding plastic articles, comprising a rotary base, or turret (12), a first set of actuators or upper actuators (34), a second of actuators or lower actuators (65b), a linear bearing (26, 28, 30) guiding the upper actuators (34) to move the mold blocks or tool holder (44) along the slide shaft (24), carrying an array of mold cores (46).

In regard to claims 1-15, Ingram fails to disclose a rail.

Uchiyama (5,950,531) discloses an electric press machine, comprising an upper punch holder (15) a lower punch holder (22); wherein the upper and lower punch holders are vertically movable along the guide post (27) by a rail (28a) and a plurality of guide rollers (30b, 32), so that the rotation of the motor can be converted to a linear movement of the punch holders (col. 5, lines 5-22) and that the position of the punch holders can be controlled at any time during the molding process (col. 6, lines 1-19).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Ingram by providing an additional rail and guide roller as taught by Uchiyama in order to effectively control the movement and the positions of the molds during the molding process.

In regard to claims 16-27, Ingram discloses an upper cam (38) and lower cam (60) connected to the upper actuators (34) and lower actuators (65) for controlling the movement of the tool holders and the molds.

In regard to claims 90-93, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Ingram by replacing the tool holder or adding additional bracket for supporting the tool holder as taught by Uchiyama (49; col. 11, lines 4-7) so that the movement of the mold sections along the guide post can be more accuracy controlled.

4. Claims 28-31 and 48-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ingram (5,866,177) in view of Seger (6,572,356).

Ingram discloses a rotating apparatus as described above, in which the apparatus further comprises a latch mechanism associated with each pair of upper/lower mold tools or opposed male and female mold sections, for keeping these mold sections closed during the molding process (abstract, col. 4, line 63 to col. 5, line 36).

However, Ingram fails to disclose a shear plate, a locking rod and a corresponding transverse bore.

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Seeger discloses a locking means for a quick change tooling system, comprising an upper mold plate (12) and a base (16), wherein the mold plate (12) is connected to a base by a locking mechanism (55) which includes a locking rod (66) having an enlarged end (63) and a narrower portion (66), a shear plate, or a corresponding transverse bore (68) for receiving the locking rod (Figures 2-3), and a plurality of locking balls (83) to facilitate the engagement of the locking rod and the bore; this locking mechanism provide a precision fit between the mold member to obtain precise location and alignment of the mold on the press platen (co. 1, lines 54-67).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Ingram by replacing the latching mechanism with a locking device includes a locking rod and a corresponding bore as taught by Seeger in order to provide a precision fit between the mold parts to obtain precise location and alignment between the upper/lower mold sections or between male/female molds.


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Khanh T. Nguyen whose telephone number is 571-272-1136. The examiner can normally be reached on Monday- Friday, 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gupta Yogendra can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TN



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